

REMARKS/ARGUMENTS

Reconsideration of this application is requested. Claims 2-4 and 11 will be active in the application subsequent to entry of this Amendment.

Although not indicated in the current Official Action, counsel assumes that claims 2 and 3 remain active in the application but withdrawn from active consideration as directed to non-elected subject matter. This would leave claims 1 and 4 or, in view of this Amendment, claims 4 and 11.

The Office Action Summary items 2a. and 2b. are both checked. One indicates the Action is Final and the other that it is a non-final Action. The November 1, 2007 entry in private PAIR (copy attached) shows "Non-Final Rejection." I confirmed with the examiner by telephone on November 9, 2007 that it is not a Final Rejection and our docketing records have been amended accordingly.

The specification has been amended in order to attend to the typographical errors noted by the examiner in item 3 of the Official Action.

For purposes of clarity, and as explained in further detail below, the Y' in claim 1 has been changed to a "U" to avoid confusion and, for convenience, claim 1 has been replaced with new claim 11. Accordingly, claims 4 and 11 are active in the application.

The current Official Action in item 5 contains a single rejection of claims 1 and 4 as lacking patentability over the disclosures of U.S. 6,583,082 to Hoang et al in view of Gillis WO 97/38019. The examiner has made various observations and comments in support of the combination of documents and conclusions drawn from this combination and applicants wish to especially address these observations.

In item 5, third full paragraph, applicants agree that Hoang indeed teaches a catalyst composition comprising a phosphinimine ligand containing Group IVB metallocene catalyst and an aluminoxane cocatalyst.

However combining this teaching with the preparation of ethylene/ α -olefin/vinyl norbornene terpolymer as described by Gillis is not obvious for the skilled artisan, as Gillis teaches that "If the metallocene procatalyst is entirely one of formula $(Cp^1R^1_m)R^3_nY_rMX_8$, it is activated with the aforementioned cation-generating cocatalyst". (Page 13, lines 16-19 and page 12, line 23.) The cation-generating cocatalyst comprises a first, second and third component

(page 18, lines 9-21), with a second component having at least one aryl group possessing at least one electron-withdrawing substituent (page 18, lines 17, 18).

As the aluminoxane cocatalyst of Hoang does not fulfill these requirements, the skilled artisan would not combine Hoang and Gillis.

Applicants also wish to directly respond to the examiner's comments bridging pages 3 and 4 of the Official Action and specifically the examiner's stated positions that Example 4 and Comparative Example 3 are not comparable.

The examiner's statement with respect to the comparison between Example 4 and Comparative Example C is inconsistent with the facts. To explain, it is well known in the art that Catalyst 1 as such is not active and needs a cocatalyst to be transformed to the active catalyst species of Catalyst 2. The catalysts used in both experiments are therefore in fact equivalent. The main difference is the more than 10 fold amount of VNB in the example according to the present invention, which however does not cause any gelation, but leads to a degree of branching comparable with a ten fold lower amount of VNB with the state of the art combination of catalyst and co-catalyst.

Applicants also take issue with the examiner's comment that the comparison of Example 4 and Comparative Example 3 "is still not commensurate with the scope of the instant claims ..." for the reasons stated.

The comment that Example 4 is not commensurate with the scope of the instant claims is an incorrect observation as well. According to page 6, lines 21-23, Cp is a ligand selected from the group consisting of cyclopentadienyl and substituted cyclopentadienyl as described in claim 1.

For clarity reasons a new claim 11 is submitted in which Y' has been replaced by U, to avoid confusion with Y.

The information/evidence included in the description of the invention demonstrates non-obviousness. Example 3 shows that even with a very high dosing of VNB, no gelation occurs. Dosing more than 50 mmol/L VNB, which is an extremely high amount, shows indeed higher long chain branching than Example 4 with lower amounts of VNB dosing. However, Example 10 shows, that by reducing temperature and catalyst the amount of branching can be brought

back to the level of Example 4. With the state of the art catalyst systems these high amounts of VNB dosing were not possible at all without complete gelation.

Applicants request that additional consideration and review of the pending claims be provided. It will be apparent then that the comparisons between Example 4 and Comparative Example 3 are valid ones, that they demonstrate unexpected results and the results are consistent with the scope of the claims now being examined.

Reconsideration and favorable action are solicited. Should the examiner require further information, please contact the undersigned.

Respectfully submitted,

NIXON & VANDERHYE P.C.

By: _____



Arthur R. Crawford
Reg. No. 25,327

ARC:eaw
901 North Glebe Road, 11th Floor
Arlington, VA 22203-1808
Telephone: (703) 816-4000
Facsimile: (703) 816-4100